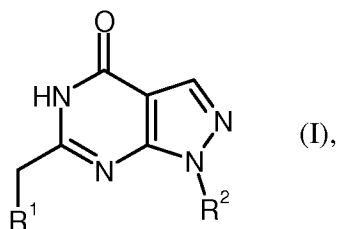


This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) A compound of the formula



in which

R<sup>1</sup> is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl or C<sub>3</sub>-C<sub>8</sub>-cycloalkyl, where C<sub>1</sub>-C<sub>8</sub>-alkyl is optionally substituted by oxo, and

where C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl and C<sub>3</sub>-C<sub>8</sub>-cycloalkyl are optionally substituted by up to 3 radicals independently of one another selected from the group of C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, hydroxycarbonyl, cyano, amino, nitro, hydroxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, halogen, trifluoromethyl, trifluoromethoxy,

C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylamino-carbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio,

where

C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy-carbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl,

heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl and C<sub>1</sub>-C<sub>6</sub>-alkylthio are optionally substituted by one to three radicals independently of one another selected from the group of hydroxy, cyano, halogen, trifluoromethyl, trifluoromethoxy, hydroxycarbonyl and a group of the formula –NR<sup>3</sup>R<sup>4</sup>,

where

R<sup>3</sup> and R<sup>4</sup> are independently of one another hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

or

R<sup>3</sup> and R<sup>4</sup> together with the nitrogen atom to which they are bonded are 5- to 8-membered heterocyclyl,

R<sup>2</sup> is phenyl or heteroaryl, where phenyl is substituted by 1 to 3 radicals and heteroaryl is optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, trifluoromethoxy, amino, nitro, hydroxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, halogen, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl and C<sub>1</sub>-C<sub>6</sub>-alkylthio,

where C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl and C<sub>1</sub>-C<sub>6</sub>-alkylthio are optionally substituted by one to three radicals independently of one another selected from the group of hydroxy, cyano, halogen, trifluoromethyl, trifluoromethoxy, hydroxycarbonyl and a group of the formula –NR<sup>3</sup>R<sup>4</sup>,

where

R<sup>3</sup> and R<sup>4</sup> have the meanings indicated above,

or salts, solvates and/or solvates of the salts a salt, solvate or solvate of a salt thereof.

2. (Currently Amended) The compound of ~~Claim~~ claim 1, where

R<sup>1</sup> is C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl or C<sub>3</sub>-C<sub>8</sub>-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, hydroxycarbonyl, cyano, amino, nitro, hydroxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, halogen, C<sub>6</sub>-C<sub>10</sub>-aryl-carbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl and C<sub>1</sub>-C<sub>6</sub>-alkylthio,

where C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, C<sub>6</sub>-C<sub>10</sub>-arylcarbonyl-amino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy-carbonyl,

C<sub>6</sub>-C<sub>10</sub>-arylaminocarbonyl, heteroarylaminocarbonyl,

heteroarylcarbonylamino,

C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl and C<sub>1</sub>-C<sub>6</sub>-alkylthio are optionally substituted by a radical selected from the group of hydroxy, cyano, halogen, hydroxycarbonyl and a group of the formula -NR<sup>3</sup>R<sup>4</sup>,

where

R<sup>3</sup> and R<sup>4</sup> are independently of one another hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

or

R<sup>3</sup> and R<sup>4</sup> together with the nitrogen atom to which they are bonded are 5- to 8-membered heterocyclyl,

R<sup>2</sup> is phenyl or heteroaryl, where phenyl is substituted by 1 to 3 radicals and heteroaryl is optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, amino, nitro, hydroxy, C<sub>1</sub>-

C<sub>6</sub>-alkylamino, halogen, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylamino, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>6</sub>-alkylthio,

where C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylamino, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>6</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylamino, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>6</sub>-alkylsulphonyl and C<sub>1</sub>-C<sub>6</sub>-alkylthio are optionally substituted by a radical selected from the group of hydroxy, cyano, halogen, hydroxycarbonyl and a group of formula –NR<sup>3</sup>R<sup>4</sup>,

where

R<sup>3</sup> and R<sup>4</sup> have the meanings indicated above,

or salts, solvates and/or solvates of the salts a salt, solvate or solvate of a salt thereof.

**3. (Currently Amended)** A compound of ~~Claim~~ claim 1, where

R<sup>1</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl or C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, hydroxycarbonyl, cyano, amino, hydroxy, C<sub>1</sub>-C<sub>4</sub>-alkylamino, trifluoromethyl, fluorine, chlorine, bromine, C<sub>6</sub>-C<sub>10</sub>-arylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylaminocarbonyl, C<sub>1</sub>-C<sub>4</sub>-alkoxycarbonyl, C<sub>6</sub>-C<sub>10</sub>-arylamino, heteroarylaminocarbonyl, heteroarylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylsulphonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylsulphonyl, C<sub>1</sub>-C<sub>4</sub>-alkylthio,

where C<sub>1</sub>-C<sub>4</sub>-alkyl and C<sub>1</sub>-C<sub>4</sub>-alkoxy are optionally substituted by a radical selected from the group of hydroxy, cyano, fluorine, chlorine, bromine, hydroxycarbonyl and a group of the formula –NR<sup>3</sup>R<sup>4</sup>,

where

$R^3$  and  $R^4$  are independently hydrogen or  $C_1$ - $C_4$ -alkyl,

or

$R^3$  and  $R^4$  together with the nitrogen atom to which they are bonded are 5- to 6-membered heterocyclyl,

$R^2$  is phenyl, pyrimidyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyrimidyl, pyridyl N-oxide and pyridyl are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, amino, hydroxy,  $C_1$ - $C_4$ -alkylamino, fluorine, chlorine, bromine,  $C_6$ - $C_{10}$ -arylcarbonylamino,  $C_1$ - $C_4$ -alkylcarbonylamino,  $C_1$ - $C_4$ -alkylaminocarbonyl,  $C_1$ - $C_4$ -alkoxycarbonyl,  $C_6$ - $C_{10}$ -arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino,  $C_1$ - $C_4$ -alkylsulphonylamino,  $C_1$ - $C_4$ -alkylsulphonyl, and  $C_1$ - $C_4$ -alkylthio,

where  $C_1$ - $C_4$ -alkyl and  $C_1$ - $C_4$ -alkoxy are optionally substituted by a radical selected from the group of hydroxy, cyano, fluorine, chlorine, bromine, hydroxycarbonyl and a group of the formula  $-NR^3R^4$ ,

where

$R^3$  and  $R^4$  have the meanings indicated in ~~Claim~~ claim 1,

or salts, solvates and/or solvates of the salts a salt, solvate or solvate of a salt thereof.

**4. (Currently Amended)** A compound of ~~Claim~~ claim 1, where

$R^1$  has the meanings indicated in ~~Claim~~ claim 1, and

$R^2$  is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyridyl and pyridyl N-oxide are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of

methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or ~~salts, solvates and/or solvates of the salts~~ a salt, solvate or solvate of a salt thereof.

**5. (Currently Amended)** A compound ~~Claim~~ of claim 1, where

R<sup>1</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl or C<sub>5</sub>-C<sub>6</sub>-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C<sub>1</sub>-C<sub>4</sub>-alkyl, trifluoromethyl, fluorine, hydroxy, phenylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkyl-carbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylaminocarbonyl or phenylaminocarbonyl, and

R<sup>2</sup> is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyridyl and pyridyl N-oxide are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or ~~salts, solvates and/or solvates of the salts~~ a salt, solvate or solvate of a salt thereof.

**6. (Currently Amended)** A compound ~~Claim~~ of claim 1, where

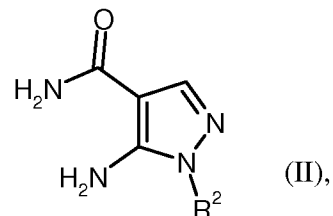
R<sup>1</sup> is C<sub>1</sub>-C<sub>5</sub>-alkyl or C<sub>5</sub>-C<sub>6</sub>-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C<sub>1</sub>-C<sub>4</sub>-alkyl, fluorine, trifluoromethyl, hydroxy, phenylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkyl-carbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylaminocarbonyl or phenylaminocarbonyl, and

R<sup>2</sup> is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by one radical and pyridyl and pyridyl N-oxide are optionally substituted by one radical in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or salts, solvates and/or solvates of the salts a salt, solvate or solvate of a salt thereof.

7. **(Withdrawn – Currently Amended)** ~~Process~~ A process for preparing ~~compounds~~ a compound according to ~~Claim~~ claim 1, ~~characterized in that comprising:~~

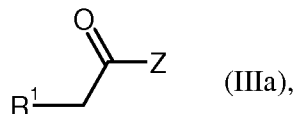
[A] converting a compound ~~compounds~~ of the formula



in which

$R^2$  has the meanings indicated in ~~Claim~~ claim 1,

~~are converted~~ by reaction with a compound of the formula

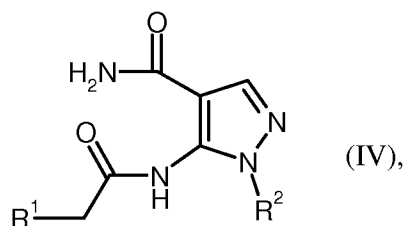


in which  $R^1$  has the meanings indicated in ~~Claim~~ claim 1,

and

Z is chlorine or bromine,

in an inert solvent and in the presence of a base, initially into ~~compounds~~ a compound of the formula



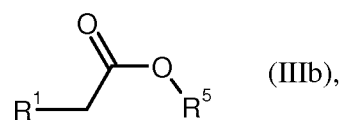
in which

$R^1$  and  $R^2$  have the meanings indicated in ~~Claim~~ claim 1,

and then ~~cyclized~~ cyclizing in an inert solvent in the presence of a base to ~~compounds~~ a compound of the formula (I),

or

[B] reacting a compound ~~compounds~~ of the formula (II) ~~are reacted~~ with a compound of the formula



in which

$R^1$  has the meanings indicated in ~~Claim~~ claim 1,

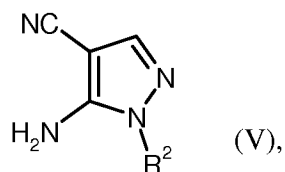
and

$R^5$  is methyl or ethyl,

in an inert solvent and in the presence of a base, with direct cyclization to a compound of formula (I),

or

[C] converting a compound ~~compounds~~ of the formula

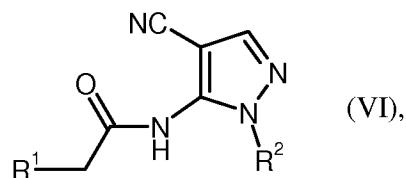


in which

$R^2$  has the meanings indicated in ~~Claim~~ claim 1,



~~are converted~~ initially by reaction with a compound of the formula (IIIa) in an inert solvent and in the presence of a base into ~~compounds~~ a compound of the formula



in which

R<sup>1</sup> and R<sup>2</sup> have the meanings indicated in ~~Claim~~ claim 1,

and ~~the latter are cyclized~~ cyclizing the compound for formula (VI) in a second step in an inert solvent and in the presence of a base and of an oxidizing agent to a compound of (I),

and the resulting compounds of the formula (I) are where appropriate reacted with the appropriate (i) solvents and/or (ii) bases or acids to give ~~their solvates, salts and/or solvates of the salts~~ a salt, solvate or solvate of a salt thereof.

8. (Cancelled)
9. (Currently Amended) A pharmaceutical composition comprising at least one ~~of the compounds~~ compound of any one of ~~Claims~~ claims 1 to 6 and at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)
13. (Withdrawn – Currently Amended) A method for the treatment of impairments of perception, concentration, learning and/or memory in ~~humans or animals~~ a human or animal comprising administering an effective amount of a compound of any one of ~~Claims~~ claims 1 to 6 to the human or animal.

- 14. (Withdrawn)** The method according to Claim 13, where the impairment is a consequence of Alzheimer's disease.